UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jeffrey C. Hood
Meyertons, Hood, Kivlin,
Kowert & Goetzel PC
P.O. Box 398
Austin, TX 78767

EXAMINER
DAO, THUY CHAN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/602,551	MAKOWSKI ET AL.
	Examiner	Art Unit
	Thuy Dao	2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _03_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _14 January 2008_.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _69-92_ is/are pending in the application.
    4a) Of the above claim(s) _43-68_ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _69-92_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _16 May 2003_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20080228

DETAILED ACTION

1. This action is responsive to the amendment filed on January 14, 2008.

2. Claims 69-92 have been examined.

Response to Amendments

3. Per Applicants' request, claims 43-68 have been canceled and claims 69-92 have been added.

4. The objection to claim 52 is withdrawn in view of Applicants' amendments.

Specification

5. The specification is objected to because of minor informalities. In page 16, line 3, the US Provisional Application Serial No. should be entered.

Response to Arguments

6. Regarding Kudukodi, US Patent Publication No. 2001/0024211 A1 (Remarks, pp. 10-17):

The Applicants stated, "… these claims have been cancelled, and replaced with new claims 69-92, rendering the rejection moot. However, Applicant presents the following arguments for the for the patentability of the new claims over the cited art … Kudukoli fails to teach or suggest all the features and limitations recited in new claim 69 …" (Remarks, page 10, last paragraph and page 11, lines 15-16).

After further consideration, the examiner notes that Kudukodi also teaches limitations cited in new claims 69-92 as applied in details below.

6. Regarding Zhang, US Patent No. 6,282,699 (Remarks, pp. 17-20):

In view of Applicants' amendments, the examiner withdraw the 35 USC 102(b) rejection over Zhang.

Claim Rejections – 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 69-92 are rejected under 35 U.S.C. 102(e) as being anticipated by Kudukoli (art of record, US Patent Publication No. 2001/0024211 A1).

Claim 69:

Kudukoli discloses *a computer-accessible memory medium that stores program instructions executable by a processor to perform:*

displaying a node in a graphical program (e.g., FIG. 13, displaying a new VI Object Reference Node in a VI graphical program, [0212-0221])*;*

receiving first user input invoking display of a plurality of functions for the node; displaying the plurality of functions for the node in response to the first user input; (e.g., FIG. 21, from said new VI Object Node, invoking display of a plurality of functions such as "Numeric", "Digital", "Slide", ..., [0215-0216]; FIG. 25, section 2, [0278], from said new VI Object Node, invoking display of functions "Control", "User Control", "ActiveX" ..., see also FIG. 22)*;*

receiving second user input selecting a function from the plurality of functions (e.g., FIG. 22, from "Slide", selecting a specific function "Vertical Pointer Slide", [0217]; from "User Control", selecting a specific function "Waveform Chart", see also [0278] and FIG. 22)*;*

determining graphical program code based on the second user input (e.g., [0022], [0029]; [0034])*,*

wherein the determined graphical program code comprises a graphical representation of an implementation of the selected function (e.g., FIG. 6, blocks 302-308, [0136-0140[; FIG. 4, [0100-0113]; [0281]; [0129])*, and*

wherein the determined graphical program code is executable to provide functionality in accordance with the selected function; associating the determined graphical program code with the node (e.g., FIG. 4, [0100-0113]; FIG. 23, [0273-0275]; [0120]; [0022]),

wherein, when the node in the graphical program executes, the determined graphical program code executes to provide the functionality in accordance with the selected function (e.g., FIG. 6, [0136-0140]; FIG. 23, [0273-0275]; [0029]).

Claim 70 (new):

The rejection of claim 69 is incorporated. Kudukoli also discloses:

the node has a first node icon which is displayed in the graphical program, and wherein the first node icon has a first appearance (e.g., [0130], [0269]),

wherein the program instructions are further executable to perform: changing the first node icon to a second appearance based on the second user input (e.g., [0030], [0130]),

wherein said changing the first node icon to a second appearance includes displaying an image corresponding to the selected function (e.g., [0269]).

Claim 71 (new):

The rejection of claim 70 is incorporated. Kudukoli also discloses *said changing the first node icon to a second appearance comprises replacing the first node icon with a second node icon* (e.g., [0225], [0230]).

Claim 72 (new):

The rejection of claim 69 is incorporated. Kudukoli also discloses *prior to said associating the determined graphical program code with the node, the node does not have any associated graphical program code* (e.g., [0212-0221]).

Claim 73 (new):

The rejection of claim 69 is incorporated. Kudukoli also discloses:

prior to said associating the determined graphical program code with the node, the node has associated default graphical program code in accordance with a default function for the node (e.g., [0225]), and

wherein the default graphical program code implements a first functionality; and wherein said associating the determined graphical program code with the node comprises replacing the default graphical program code with the determined graphical program code (e.g., [0230]).

Claim 74 (new):

The rejection of claim 69 is incorporated. Kudukoli also discloses *said receiving first user input comprises receiving the first user input to the node; and wherein said receiving second user input comprises receiving the second user input to the node (e.g., FIG. 21 and related text).*

Claim 75 (new):

The rejection of claim 69 is incorporated. Kudukoli also discloses:

said displaying the plurality of functions for the node in response to the first user input comprises: displaying a plurality of function classes for the node (e.g., FIG. 25, section 2, [0278]); and

in response to user input selecting a function class, displaying the plurality of functions, wherein the plurality of functions are in the selected function class (e.g., [0217], [0278]).

Claim 76 (new):

The rejection of claim 69 is incorporated. Kudukoli also discloses:

the node is a data acquisition (DAQ) node (e.g., [0015], [0085]);

wherein the plurality of functions for the node comprise a plurality of DAQ functions (e.g., [0080], [0092]);

wherein, prior to said associating, the DAQ node comprises one of: a generic read node; a generic write node; a generic channel creation node; a generic timing node; or a generic triggering node (e.g., [0085]); *and*

wherein, after said associating, the DAQ node comprises one of: a specific read node in accordance with the selected function; a specific write node in accordance with the selected function; a specific channel creation node in accordance with the selected function; a specific timing node in accordance with the selected function; or a specific triggering node in accordance with the selected function (e.g., [0092], [0015]).

Claim 77 (new):

Kudukoli also discloses *a computer-implemented method for configuring a graphical program node, comprising:*

displaying a node in a graphical program (e.g., FIG. 13, [0212-0221]);

receiving first user input invoking display of a plurality of functions for the node; displaying the plurality of functions for the node in response to the first user input (e.g., FIG. 21, [015-0216]; FIG. 25, [0278] and FIG. 22);

receiving second user input selecting a function from the plurality of functions (e.g., [0022], [0029], 0034]);

determining graphical program code based on the second user input (e.g., FIG. 6, [0136-0140]; [0100-0130]),

wherein the determined graphical program code comprises a graphical representation of an implementation of the selected function (e.g., [0022], [0029], [0034]), *and*

wherein the determined graphical program code is executable to provide functionality in accordance with the selected function (e.g., [0136-0140]; [0281], [0129]);

associating the determined graphical program code with the node, wherein, when the node in the graphical program executes (e.g., FIG. 4, [0100-0113]; FIG. 23, [0273-0275]),

the determined graphical program code executes to provide the functionality in accordance with the selected function (e.g., [0029], [0136-0140]).

Claim 78 (new):

The rejection of claim 77 is incorporated. Kudukoli also discloses:

the node has a first node icon which is displayed in the graphical program, the method further comprising: changing the first node icon to a second appearance based on the second user input (e.g., [0130], [0269]),

wherein said changing the first node icon to a second appearance includes displaying an image corresponding to the selected function (e.g., [0225], [0230]).

Claim 79 (new):

The rejection of claim 78 is incorporated. Kudukoli also discloses *said changing the first node icon to a second appearance comprises replacing the first node icon with a second node icon* (e.g., [0225]).

Claim 80 (new):

The rejection of claim 77 is incorporated. Kudukoli also discloses: *prior to said associating the determined graphical program code with the node, the node does not have any associated graphical program code* (e.g., [0230]).

Claim 81 (new):

The rejection of claim 77 is incorporated. Kudukoli also discloses:

prior to said associating the determined graphical program code with the node, the node has associated default graphical program code in accordance with a default function for the node (e.g., [0130], [0225]), *and*

wherein the default graphical program code implements a first functionality; and wherein said associating the determined graphical program code with

the node comprises replacing the default graphical program code with the determined graphical program code (e.g., [0269], [0230]).

Claim 82 (new):

The rejection of claim 77 is incorporated. Kudukoli also discloses *said receiving first user input comprises receiving the first user input to the node; and wherein said receiving second user input comprises receiving the second user input to the node* (e.g., [0022], [0034]).

Claim 83 (new):

The rejection of claim 77 is incorporated. Kudukoli also discloses *said displaying the plurality of functions for the node in response to the first user input comprises: displaying a plurality of function classes for the node; and in response to user input selecting a function class, displaying the plurality of functions, wherein the plurality of functions are in the selected function class* (e.g., [0215-0216]; [0278]).

Claim 84 (new):

The rejection of claim 77 is incorporated. Kudukoli also discloses

the node is a data acquisition (DAQ) node (e.g., [0015], [0085]);

wherein the plurality of functions for the node comprise a plurality of DAQ functions (e.g., [0080], [0092]);

wherein, prior to said associating, the DAQ node comprises one of: a generic read node; a generic write node; a generic channel creation node; a generic timing node; or a generic triggering node (e.g., [0085]); *and*

wherein, after said associating, the DAQ node comprises one of: a specific read node in accordance with the selected function; a specific write node in accordance with the selected function; a specific channel creation node in accordance with the selected function; a specific timing node in accordance with the selected function; or a specific triggering node in accordance with the selected function (e.g., [0092], [0015]).

Claim 85 (new):

Kudukoli also discloses *a computer-accessible memory medium that stores program instructions executable by a processor to perform:*

displaying a node in a graphical program (e.g., FIG. 13, [0212-0221]);

receiving first user input invoking display of a plurality of functions for the node; displaying the plurality of functions for the node in response to the first user input (e.g., FIG. 21, [0215-0216]; FIG. 25, [0278]);

receiving second user input selecting a function from the plurality of functions (e.g., FIG. 22, [0217]);

determining a second node based on the selected function, wherein the second node comprises a graphical representation of an implementation of the selected function (e.g., [0022], [0029], [0034]), *and*

wherein the second node comprises graphical program code executable to provide functionality in accordance with the selected function (e.g., [0136-0140], [0100-0113]);

replacing the node in the graphical program with the second node (e.g., [0225]; [0230], FIG. 22 "Vertical Pointer Slide" as the second node, and FIG. 4, [0100-0113]),

wherein, when the second node in the graphical program executes, the graphical program code of the second node executes to provide the functionality in accordance with the selected function (e.g., [0136-0140], [0029]).

Claim 86 (new):

The rejection of claim 85 is incorporated. Kudukoli also discloses *the node comprises a first node icon, and wherein said displaying the node comprises displaying the first node icon, and wherein the second node comprises: the first node icon and the graphical program code; or a second node icon and the graphical program code* (e.g., [0215-0216]).

Claim 87 (new):

The rejection of claim 85 is incorporated. Kudukoli also discloses *the node and/or the second node is one or more of: polymorphic; function switchable; or function class switchable* (e.g., [0217] and [0278]).

Claim 88 (new):

The rejection of claim 85 is incorporated. Kudukoli also discloses:

the node is a data acquisition (DAQ) node (e.g., [0015], [0085]);

wherein the DAQ node comprises one of: a generic read node; a generic write node; a generic channel creation node; a generic timing node; or a generic triggering node (e.g., [0080], [0092]); *and*

wherein the second node comprises a corresponding one of: a specific read node in accordance with the selected function; a specific write node in accordance with the selected function; a specific channel creation node in accordance with the selected function; a specific timing node in accordance with the selected function; or a specific triggering node in accordance with the selected function (e.g., [0092], [0015]).

Claim 89 (new):

Kudukoli also discloses *a computer-implemented method for configuring a graphical program node, comprising:*

displaying a node in a graphical program (e.g., FIG. 13, [0212-0221]);

receiving first user input invoking display of a plurality of functions for the node; displaying the plurality of functions for the node in response to the first user input (e.g., [0215-0216]);

receiving second user input selecting a function from the plurality of functions (e.g., [0217], [0278]);

determining a second node based on the selected function, wherein the second node comprises a graphical representation of an implementation of the selected function (e.g., [0022], [0029], [0034]), *and*

wherein the second node comprises graphical program code executable to provide functionality in accordance with the selected function (e.g., [0136-0140]);

replacing the node in the graphical program with the second node (e.g., [0100-0113]),

wherein, when the second node in the graphical program executes, the determined graphical program code executes to provide the functionality in accordance with the selected function (e.g., [0136-0140], [0225], [0230]).

Claim 90 (new):

The rejection of claim 89 is incorporated. Kudukoli also discloses *the node comprises a first node icon, and wherein said displaying the node comprises displaying the first node icon, and wherein the second node comprises: the first node icon and the graphical program code; or a second node icon and the graphical program code* (e.g., FIG. 21 and related text, [0217]).

Claim 91 (new):

The rejection of claim 89 is incorporated. Kudukoli also discloses *the node and/or the second node is one or more of: polymorphic; function switchable; or function class switchable* (e.g., [0278]).

Claim 92 (new):

The rejection of claim 89 is incorporated. Kudukoli also discloses:

the node is a data acquisition (DAQ) node (e.g., [0015], [0085]);

wherein the DAQ node comprises one of: a generic read node; a generic write node; a generic channel creation node; a generic timing node; or a generic triggering node (e.g., [0085]); *and*

wherein the second node comprises a corresponding one of: a specific read node in accordance with the selected function; a specific write node in accordance with the selected function; a specific channel creation node in accordance with the selected function; a specific timing node in accordance with the selected function; or a specific triggering node in accordance with the selected function (e.g., [0092], [0015]).

Conclusion

9. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao

/Tuan Q. Dam/

Supervisory Patent Examiner, Art Unit 2192